CLAIMS:

1. A wavelength control device for a laser device including a movable holder for making an optical component movable with respect to a laser optical axis, and

a laser controller for moving said optical component with respect to the laser optical axis and changing an incident angle of laser light on a band narrowing optical component to thereby control a center wavelength of the laser light to be a target wavelength,

wherein said movable holder comprises a first drive mechanism moving by a very short distance and a second drive mechanism moving by a longer distance than said first drive mechanism.

2. The wavelength control device for the laser device in accordance with Claim 1,

wherein said first drive mechanism comprises a piezoelectric element unit, and

wherein said second drive mechanism comprises a pulse motor unit.

3. The wavelength control device for the laser device in accordance with Claim 1,

wherein on moving said optical component, said laser

sub A1 cont'd

controller moves said optical component by means of said first drive mechanism, and

thereafter, moves said optical component by means of said second drive mechanism.

4. The wavelength control device for the laser device in accordance with Claim 2,

wherein on moving said optical component, said laser controller moves said optical component by means of said piezoelectric element unit, and

thereafter, moves said optical component by means of said pulse motor unit.

5. The wavelength control device for the laser device in accordance with Claim 1,

wherein said laser controller

moves said optical component by means of said first drive mechanism to set the center wavelength at the predetermined target wavelength, and

compensates a positional change of said optical component caused by returning said first drive mechanism to a neutral position by means of said second drive mechanism, in a state in which the center wavelength is set at the target wavelength, at the same time that the laser controller returns said first drive mechanism to the neutral position.

6. The wavelength control device for the laser device in accordance with Claim 2,

wherein said laser controller

moves said optical component by means of said piezoelectric element unit to set the center wavelength at the predetermined target wavelength, and

compensates a positional change of said optical component caused by returning said piezoelectric element unit to a neutral position by means of said pulse motor unit, in a state in which the center wavelength is set at the target wavelength, at the same time that the laser controller returns said piezoelectric element unit to the neutral position.

7. The wavelength control device for the laser device in accordance with any one of Claim 1, Claim 3, and Claim 5, further comprising:

a wavelength monitor for monitoring the center wavelength of the laser light,

wherein on resuming laser oscillation after stopping the laser oscillation for more than a predetermined period of time, said laser controller

drives said second drive mechanism and thereby changes a position of said optical component with respect to the laser optical axis previously while the oscillation is stopped, based

Sub A1 cont'd

on the target wavelength after resuming the oscillation, and drives said movable holder by means of said first drive mechanism and thereby changes the position of said optical component with respect to the laser optical axis again, immediately after resuming the oscillation, based on the center wavelength of the laser light monitored by said wavelength monitor.

8. The wavelength control device for the laser device in accordance with any one of Claim 2, Claim 4, and Claim 6, further comprising:

a wavelength monitor for monitoring the center wavelength of the laser light,

wherein on resuming laser oscillation after stopping the laser oscillation for more than a predetermined period of time, said laser controller

drives said pulse motor unit and thereby changes a position of said optical component with respect to the laser optical axis previously while the oscillation is stopped, based on the target wavelength after resuming the oscillation, and

drives said movable holder by means of said piezoelectric element unit and thereby changes the position of said optical component with respect to the laser optical axis again, immediately after resuming the oscillation, based on the center wavelength of the laser light monitored by said wavelength

sub A' cont'd monitor.

add B1